



REC 15-163

Knollwood Energy of MA LLC  
P.O. Box 30  
Chester, New Jersey 07930

NH-PUC 18 MAY 15 PM 12:50

May 15, 2015

Debra A. Howland  
Executive Director  
New Hampshire Public Utilities Commission  
21 South Fruit Street, Suite 10  
Concord, NH 03301-2429

Dear Ms Howland,

Enclosed please find the amended application for the Richard Kardell system to be part of the Knollwood Energy of MA LLC (NH-II-13-089) Class II Photovoltaic aggregation for New Hampshire Renewable Energy Certificates (RECs) generated from customer-sited sources, pursuant to New Hampshire Code of Administrative Rules Puc 2506.

Customer and Facility Information

Richard Kardell  
14 Marions Way  
Gorham, NH 03581  
603.733.6234  
kardellr@msn.com

The new Nepool GIS ID # for this facility is: NON48457. Also enclosed are the Simplified Process Interconnection Application and Service Agreement, and the Certificate of Completion. An electronic version has been sent to [executive.director@puc.nh.gov](mailto:executive.director@puc.nh.gov).

Please do not hesitate to contact me if you have any questions regarding this application.

Thank you for your consideration,

Linda Modica  
New England REC Operations Manager  
**Knollwood Energy of MA LLC**  
973.879.7826  
[linda@knollwoodenergy.com](mailto:linda@knollwoodenergy.com)

Enclosures (3)



# State of New Hampshire Public Utilities Commission

21 S. Fruit Street, Suite 10, Concord, NH 03301-2429



## DRAFT APPLICATION FORM FOR RENEWABLE ENERGY CERTIFICATE (REC) ELIGIBILITY FOR CLASS I AND CLASS II SOURCES WITH A CAPACITY OF 100 KILOWATTS OR LESS

Pursuant to New Hampshire Administrative Code [Puc 2500](#) Rules including Puc 2505.08, Certification of Certain Customer-Sited Sources

- Please submit one (1) original and two (2) paper copies of the completed application and cover letter\* to:  
**Debra A. Howland, Executive Director, New Hampshire Public Utilities Commission**  
**21 South Fruit Street, Suite 10, Concord, NH 03301-2429**
- Send an electronic version of the completed application and the cover letter electronically to  
[executive.director@puc.nh.gov](mailto:executive.director@puc.nh.gov).
- The cover letter must include complete contact information and identify the renewable energy class for which the applicant seeks eligibility. Pursuant to Puc 2505.01, the Commission is required to render a decision on an application within 45 days of receiving a completed application.

If you have any questions please contact Barbara Bernstein at (603) 271-6011 or [Barbara.Bernstein@puc.nh.gov](mailto:Barbara.Bernstein@puc.nh.gov).

- Photovoltaic (PV) solar facilities are Class II resources. Contact [Barbara.Bernstein@puc.nh.gov](mailto:Barbara.Bernstein@puc.nh.gov) for assistance.

Eligibility Requested for: Class I ☐ Class II ☒ Check here ☒ if this facility part of an aggregation.

If the facility is part of an aggregation, please list the aggregator's name. Knollwood Energy of MA

- Provide the following information for the owner of the PV system.

Applicant Name Richard Kardell Email [kardellr@msn.com](mailto:kardellr@msn.com)

Address 14 Marions Way City Gorham State NH Zip 03581

Telephone 603.733.6234 Cell \_\_\_\_\_

- For business applicants, provide the facility name and contact information (if different than applicant contact information).

Facility Name \_\_\_\_\_ Primary Contact \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_ Cell \_\_\_\_\_

Email address: \_\_\_\_\_

- Provide a complete list of the equipment used at the facility, including the revenue grade REC meter, and, if applicable, the inverter. Your facility will not qualify for RECs without a REC meter.

equipment	quantity	Type	equipment	quantity	Type
PV panels	36	Suniva OPT265-60-4-100-H4-40M	other		
Inverter	36	Enphase M250	other		
meter	1	Landis+Gyr Focus	other		

- A copy of the interconnection agreement and the approval to operate your PV system from your electric utility must be included with your application.
- For PSNH customers, both the *Simplified Process Interconnection Application* and *Exhibit B - Certificate of Completion* are required.

What is the nameplate capacity of your facility (found on your interconnection agreement)? 9.0 AC

What was the initial date of operation (the date your utility approved the facility)? 11/5/14

- Provide the name, license number and contact information of the installer, or indicate that the equipment was installed directly by the customer.

Installer

Name Smart Energy of New England Contact David Belanger License # (if applicable) n/a

Address PO Box 56 City Colebrook State: NH Zip 03576

Telephone 603.496.3504 email david@smartenergyne.com

If the equipment was installed directly by the customer, please check here: ☐

- Provide the name and contact information of the equipment vendor.

☐ X Check here if the installer provided the equipment and proceed to the next question.

Business Name \_\_\_\_\_ Contact \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_ email \_\_\_\_\_

- If an independent electrician was used, please provide the following information. (*Sunray corporate electrician*)

Electrician's Name Rodney Smith License # 10774M

Business Name S & S Electric Email \_\_\_\_\_



Address 241 US Route 3 City Stewartstown State NH Zip 03576

- **Provide the name of the independent monitor for this facility.** (A [list](http://www.puc.nh.gov/Sustainable%20Energy/Renewable_Energy_Source_Eligibility.htm) of approved independent monitors is available at [http://www.puc.nh.gov/Sustainable%20Energy/Renewable\\_Energy\\_Source\\_Eligibility.htm](http://www.puc.nh.gov/Sustainable%20Energy/Renewable_Energy_Source_Eligibility.htm).)

Independent Monitor's Name Tom Kelly Natural Capital, LLC

Is the facility certified under another state's renewable portfolio standard?    yes ☐    no ☒  
If "yes", then provide proof of the certification as **Attachment C**.

- *Please note, if your facility is part of an aggregation, your aggregator should provide you with the following information.*
- **In order to qualify your facility's electrical production for Renewable Energy Certificates (RECs), you must register with the NEPOOL – GIS. Contact information for the GIS administrator follows:**

James Webb  
Registry Administrator, APX Environmental Markets  
224 Airport Parkway, Suite 600, San Jose, CA 95110  
Office: 408.517.2174    [jwebb@apx.com](mailto:jwebb@apx.com)

If you are not part of an aggregation, Mr. Webb will assist you in obtaining a GIS facility code.

GIS Facility Code # NON48457                      Asset ID # NON48457

- **Complete an affidavit by the applicant or qualified installer that the project is installed and operating in conformance with any applicable state/local building codes.** Use either the following affidavit form or provide a separate document.
- **The Commission requires a notarized affidavit as part of the application.**

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#### AFFIDAVIT

The Undersigned applicant declares under penalty of perjury that the project is installed and operating in conformance with all applicable building codes. (please see attached)

Applicant's Signature \_\_\_\_\_ Date \_\_\_\_\_

Applicant's Printed Name Linda Modica

Subscribed and sworn before me this \_\_\_\_\_ Day of \_\_\_\_\_ (month) in the year \_\_\_\_\_

County of \_\_\_\_\_ State of \_\_\_\_\_

\_\_\_\_\_  
Notary Public/Justice of the Peace

My Commission Expires \_\_\_\_\_

- Complete an affidavit by the applicant or qualified installer that the project is installed and operating in conformance with any applicable state/local building codes. Use either the following affidavit form or provide a separate document.
- The Commission requires a notarized affidavit as part of the application.

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**AFFIDAVIT**


The Undersigned applicant declares under penalty of perjury that the project is installed and operating in conformance with all applicable building codes.

Applicant's Signature \_\_\_\_\_ Date 5/13/15

Applicant's Printed Name Linda Modica

Subscribed and sworn before me this 13 Day of May (month) in the year 2015

County of Morris State of New Jersey

  
\_\_\_\_\_  
Notary Public/Justice of the Peace

My Commission Expires 2/16/17

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- Complete the following checklist. If you have questions, contact [barbara.bernstein@puc.nh.gov](mailto:barbara.bernstein@puc.nh.gov).

CHECK LIST: The following has been included to complete the application:	YES
• All contact information has been provided.	X
• A copy of the interconnection agreement. PSNH Customers should include both <i>the Interconnection Standards for Inverters Sized up to 100 KVA</i> <b>and</b> <i>Exhibit B – Certification of Completion for Simplified Process Interconnection</i> .	X
• Documentation of the distribution utility's approval of the installation.*	X
• If the facility is participating in another state's renewable portfolio standard (RPS) program, documentation of certification in other state's RPS.	
• A signed and notarized attestation.	X
• A GIS number obtained from the GIS Administrator.	X
• The document has been printed and notarized.	X
• The original and 2 copies are included in the packet mailed to Debra Howland, Executive Director of the PUC.	X
• An electronic version of the completed application has been sent to <a href="mailto:executive.director@puc.nh.gov">executive.director@puc.nh.gov</a> .	X
*Usually included in the interconnection agreement.	

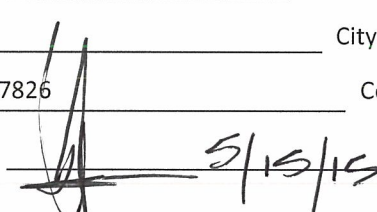
- If the application has been prepared by someone other than the applicant, complete the following. If the application was prepared by the applicant, check here ☐ and skip this section.

**PREPARER'S INFORMATION**

Preparer's Name Linda Modica Email address: [linda@knollwoodenergy.com](mailto:linda@knollwoodenergy.com)

Address PO Box 30 City Chester State NJ Zip 07930

Telephone 973.879.7826 Cell \_\_\_\_\_

Preparer's Signature:  5/15/15

RECEIVED

SEP 24 2014

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE  
INTERCONNECTION STANDARDS FOR INVERTERS  
SIZED UP TO 100 KVA

SESD

## Simplified Process Interconnection Application and Service Agreement

PSNH Application Project ID#: N3169**Contact Information:**

Legal Name and Address of Interconnecting Customer (or, Company name, if appropriate)

Customer or Company Name (print): Richard Kardell

Contact Person, if Company: \_\_\_\_\_

Mailing Address: 14 Marion's WayCity: GorhamState: NHZip Code: 03581

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

**Alternative Contact Information** (e.g., System installation contractor or coordinating company, if appropriate):Name: Smart Energy of New England Inc.Mailing Address: 4 Titus Hill RoadCity: ColebrookState: NHZip Code: 03576Telephone (Daytime): 603-496-3504 (Evening): \_\_\_\_\_Facsimile Number: 866-386-0242 E-Mail Address: david@smartenergyne.com**Electrical Contractor Contact Information** (if appropriate):Name: S & S ElectricMailing Address: 241 US Route 3City: StewartstownState: NHZip Code: 03576Telephone (Daytime): 603-246-8698 (Evening): n/aFacsimile Number: n/a E-Mail Address: n/a**Facility Site Information:**Facility (Site) Address: 14 Marion's Way ✓City: GorhamState: NHZip Code: 00581

Electric

Service Company: PSNHAccount Number: 56824815039 ✓Meter Number: G54600372 ✓

Account and Meter Number: Please consult an actual PSNH electric bill and enter the correct Account Number and Meter Number on this application. If the facility is to be installed in a new location, please provide the PSNH Work Request number.

PSNH Work Request # \_\_\_\_\_

**Non-Default Service Customers Only:**

Competitive Electric

Energy Supply Company: \_\_\_\_\_ Account Number: \_\_\_\_\_

(Customer's with a Competitive Energy Supply Company should verify the Terms &amp; Conditions of their contract with their Energy Supply Company.)

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE  
INTERCONNECTION STANDARDS FOR INVERTERS  
SIZED UP TO 100 KVA

**Simplified Process Interconnection Application and Service Agreement**

**Facility Machine Information:**

Generator/ Inverter Manufacturer: Enphase ✓ Model Name & Number: M250 Microinverter ✓ Quantity: 36 ✓  
Nameplate Rating: 0.250 ✓ (kW) 240 (kVA) (AC Volts) Phase: Single ☒ Three ☐

Nameplate Rating: The AC Nameplate rating of the individual inverter.

System Design Capacity: 9 ✓ (kW) (kVA) Battery Backup: Yes ☐ No ☒ ✓

System Design Capacity: The system total of the inverter AC ratings. If there are multiple inverters installed in the system, this is the sum of the AC nameplate ratings of all inverters.

Net Metering: If Renewably Fueled, will the account be Net Metered? Yes ☒ No ☐

✓ Prime Mover: Photovoltaic ☒ Reciprocating Engine ☐ Fuel Cell ☐ Turbine ☐ Other \_\_\_\_\_

Energy Source: Solar ☒ Wind ☐ Hydro ☐ Diesel ☐ Natural Gas ☐ Fuel Oil ☐ Other \_\_\_\_\_

**Inverter-based Generating Facilities:**

UL 1741 / IEEE 1547.1 Compliant (Refer To Part Puc 906 Compliance Path For Inverter Units, Part Puc 906.01 Inverter Requirements)  
Yes ☒ No ☐

✓ The standard UL 1741.1 dated May, 2007 or later, "Inverters, Converters, and Controllers for Use With Independent Power Systems," addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers choose to submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL 1741.1. This term "Listed" is then marked on the equipment and supporting documentation. *Please include, any documentation provided by the inverter manufacturer describing the inverter's UL 1741/IEEE 1547.1 listing.*

**External Manual Disconnect Switch:**

An External Manual Disconnect Switch shall be installed in accordance with 'Part Puc 905 Technical Requirements For Interconnections For Facilities, Puc 905.01 Requirements For Disconnect Switches and 905.02 Disconnect Switch.'

✓ Yes ☒ No ☐

Location of External Manual Disconnect Switch: By the existing meter on the workshop ✓

Project Estimated Install Date: September 2014

Project Estimated In-Service Date: October 2014

**Interconnecting Customer Signature:**

I hereby certify that, to the best of my knowledge, all of the information provided in this application is true and I agree to the **Terms and Conditions for Simplified Process Interconnections** attached hereto:

Customer Signature: [Signature] Title: \_\_\_\_\_ Date: 9/9/14

*Please include a one-line and/or three-line diagram of proposed installation. Diagram must indicate the generator connection point in relation to the customer service panel and the PSNH meter socket. Applications without such a diagram may be returned.*

**For PSNH Use Only**

**Approval to Install Facility:**

Installation of the Facility is approved contingent upon the Terms and Conditions For Simplified Process Interconnections of this Agreement, and agreement to any system modifications, if required.

Are system modifications required? Yes ☐ No ☒ To be Determined: ☐

Company Signature: [Signature] Title: SR-ENGINEER Date: 9.30.14



PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE  
INTERCONNECTION STANDARDS FOR INVERTERS  
SIZED UP TO 100 KVA  
**Terms and Conditions for Simplified Process Interconnections**

Company waives inspection/Witness Test: Yes ☒ No ☐

Date of inspection/Witness Test: \_\_\_\_\_

1. **Construction of the Facility.** The Interconnecting Customer may proceed to construct the Facility in compliance with the specifications of its Application once the Approval to Install the Facility has been signed by the Company. Such Approval relates only to the PSNH and Puc 900 electrical interconnection requirements, and does not convey any permissions or rights associated with permits, code enforcement, easements, rights of way, set back, or other physical construction issues.
2. **Interconnection and operation.** The Interconnecting Customer may operate Facility and interconnect with the Company's system once the all of the following has occurred:
  - 2.1. **Municipal Inspection.** Upon completing construction, the Interconnecting Customer will cause the Facility to be inspected or otherwise certified by the local electrical wiring inspector with jurisdiction.
  - 2.2. **Certificate of Completion.** The Interconnecting Customer returns the Certificate of Completion to the Agreement to the Company at address noted.
  - 2.3. **Company has completed or waived the right to inspection.**
3. **Company Right of Inspection.** The Company will make every attempt within ten (10) business days after receipt of the Certificate of Completion, and upon reasonable notice and at a mutually convenient time, conduct an inspection of the Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with the Interconnection Standard. The Company has the right to disconnect the Facility in the event of improper installation or failure to return Certificate of Completion. All projects larger than 10 kVA will be witness tested, unless waived by the Company.
4. **Safe Operations and Maintenance.** The Interconnecting Customer shall be fully responsible to operate, maintain, and repair the Facility.
5. **Disconnection.** The Company may temporarily disconnect the Facility to facilitate planned or emergency Company work.
6. **Metering and Billing.** All renewable Facilities approved under this Agreement that qualify for net metering, as approved by the Commission from time to time, and the following is necessary to implement the net metering provisions:
  - 6.1. **Interconnecting Customer Provides:** The Interconnecting Customer shall furnish and install, if not already in place, the necessary meter socket and wiring in accordance with accepted electrical standards. In some cases the Interconnecting Customer may be required to install a separate telephone line.
  - 6.2. **Company Installs Meter.** The Company will make every attempt to furnish and install a meter capable of net metering within ten (10) business days after receipt of the Certificate of Completion if inspection is waived, or within 10 business days after the inspection is completed, if such meter is not already in place.
7. **Indemnification:** Interconnecting Customer and Company shall each indemnify, defend and hold the other, its directors, officers, employees and agents (including, but not limited to, Affiliates and contractors and their employees), harmless from and against all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever for personal injury (including death) or property damages to unaffiliated third parties that arise out of, or are in any manner connected with, the performance of this Agreement by that party, except to the extent that such injury or damages to unaffiliated third parties may be attributable to the negligence or willful misconduct of the party seeking indemnification.
8. **Limitation of Liability.** Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever.
9. **Termination.** This Agreement may be terminated under the following conditions:
  - 9.1. **By Mutual Agreement.** The Parties agree in writing to terminate the Agreement.
  - 9.2. **By Interconnecting Customer.** The Interconnecting Customer may terminate this Agreement by providing written notice to Company.
  - 9.3. **By Company.** The Company may terminate this Agreement (1) if the Facility fails to operate for any consecutive 12 month period, or (2) in the event that the Facility impairs or, in the good faith judgment of the Company, may imminently impair the operation of the electric distribution system or service to other customers or materially impairs the local circuit and the Interconnecting Customer does not cure the impairment.
10. **Assignment/Transfer of Ownership of the Facility.** This Agreement shall survive the transfer of ownership of the Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.
11. **Interconnection Standard.** These Terms and Conditions are pursuant to the Company's "Interconnection Standards for Inverters Sized Up to 100 kVA" for the Interconnection of Customer-Owned Generating Facilities, as approved by the Commission and as the same may be amended from time to time ("Interconnection Standard"). All defined terms set forth in these Terms and Conditions are as defined in the Interconnection Standard (see Company's website for the complete document).

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE  
INTERCONNECTION STANDARDS FOR INVERTERS  
SIZED UP TO 100 KVA (Continued)

**Exhibit B - Certificate of Completion for Simplified Process Interconnections**

Installation Information:

☐ Check if owner-installed

Customer or Company Name (print): Richard Kardell  
Contact Person, if Company: \_\_\_\_\_  
Mailing Address: 14 Marion's Way  
City: Gorham State: NH Zip Code: 03581  
Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_  
Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Address of Facility (if different from above): \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Generation Vendor: Smart Energy of New England Inc. Contact Person: David Belanger

I hereby certify that the system hardware is in compliance with Puc 900.

Vendor Signature: \_\_\_\_\_

Date: 10/13/14

Electrical Contractor's Name (if appropriate): S & S Electric Rodney G Smith  
Mailing Address: 241 US Route 3  
City: Stewartstown State: NH Zip Code: 03576  
Telephone (Daytime): 603-246-8698 (Evening): \_\_\_\_\_  
Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_  
License number: 10774M

Date of approval to install Facility granted by the Company: 10/1/14 Installation Date: 10/13/14

Application ID number: N3169

Inspection:

The system has been installed <sup>JKS</sup> ~~and inspected~~ in compliance with the local Building/Electrical Code of

Gorham / Coos - POMOUES w/ GORHAM ZONING ORDINANCE  
(City/County)

Signed (Local Electrical Wiring Inspector, or attach signed electrical inspection): John K. Scarinza - CODE OFFICER

Name (printed): JOHN K. SCARINZA

Date: 11/5/2014

Customer Certification:

I hereby certify that, to the best of my knowledge, all the information contained in this Interconnection Notice is true and correct. This system has been installed and shall be operated in compliance with applicable electrical standards. Also, the initial start up test required by Puc 905.04 has been successfully completed.

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_